AUTHOR INDEX

(D) Denotes Demonstration, (T) Title only, (C) Communication, (PC) Poster Communication

ABBOTT N. Joan & BUTT A.M. A micro-electrode study of K^+ transport at the dogfish glial blood–brain barrier. (C) 29*P*

AKASU T., GALLAGHER J.P., HIRAI K. & SHINNICK-GALLAGHER P. Vasoactive intestinal polypeptide depolarizations in cat bladder parasympathetic ganglia. 457

AL-DAMLUJI S., GROSSMAN A. & BESSER G.M. Central alpha-1 adrenoceptors stimulate ACTH secretion in man. (C) 45*P*

ALDRIDGE M.C., BIGLIN J.E.J., CHADWICK S.J.D. & DUDLEY H.A.F. A method for the measurement of total hepatic blood flow in the anaesthetized rabbit. (D) 6*P*

ALEXANDER D.P. *see* TAN C.B., ALEXANDER D.P. & BRITTON H.G. Chemical sympathectomy *in utero* in the sheep. (D) (T) 16*P*

ALEXANDER D.P., BRITTON H.G., REDSTONE D. & TAN C.B. Assessment of fetal hypoxia using the sheep fetus as a model. (D) (T) 16*P*

ALEXANDER D. Pauline, FOSTER C.L. & TAN C.B. Localization of Tamm-Horsfall glycoprotein in the nephron of the human, rat and hamster kidney as shown by light and electron microscopy. (D) (T) 16*P*

ALLEN J.M., IGGULDEN H.L.A. & MCHALE N.G. β-adrenergic inhibition of bovine mesenteric lymphatics. 401

APATU R.S.K. & BARNES R.J. Hepatic blood flow and oxygen consumption in the sheep during fetal, neonatal and adult life. (C) 28*P*

ARMITAGE W.J. Effect of solute concentration on intracellular water volume and hydraulic conductivity of human blood platelets. 375

ATKINS A., CLARKE D.N., JONES J., POWELL J., SAPSFORD R.N., SIRS J.A., STANBRIDGE R. DE L. & SYMONS G.V. Changes of erythrocyte deformability during cardiac by-pass surgery in man. (C) 50*P*

BABIJ P., HUNDAL H.S., RENNIE M.J. & WATT P.W. Effects of corticosteroid on glutamine transport in rat skeletal muscle. (C) 35*P*

BABIKER M.M. Binding of [^{51}Cr]ethylenediaminetetraacetate to proteins of human plasma. 117

BALDO G.J., COHEN I.S. & VAN DER KLOOT W. Estimating the time course of evoked quantal release at the frog neuromuscular junction using end-plate current latencies. 503

BARNES P.J., CONRADSON T.-B.G., DIXON C.M.S., FULLER R.W. & MAXWELL D.L. Effect of infused adenosine on cardiovascular and airway function in conscious man. (C) 22*P*

BARNES P.J., CONRADSON T.-B.G., DIXON C.M.S. & FULLER R.W. A comparison of the cutaneous actions of substance P, neurokinin A and calcitonin gene-related peptide in man. (C) 48*P*

BARNES R.J. *see* APATU R.S.K. & BARNES R.J. Hepatic blood flow and oxygen consumption in the sheep during fetal, neonatal and adult life. (C) 28*P*

BARTON Amanda, COWBURN R., ELLIOT M. & HARDY J. The use of cell harvesters to study the kinetics of active uptake and receptor binding. (D) (T) 16*P*

BEARD R.W., RANDALL N.J., REGINALD P.W., SUTHERLAND I.A. & WERTHEIM D.F.P. Postural changes in pelvic blood flow in women. (D) 9*P*

BECKET A.J., EACOTT D.W., GOLDBERG P.L., SEVER P.S. & THOM S. A vacuum chamber for the application of lower-body negative pressure to human subjects. (D) 10*P*

BELARDETTI Francesco, SCHACHER Samuel & SIEGELBAUM Steven A. Action potentials, macroscopic and single channel currents recorded from growth cones of *Aplysia* neurones in culture. 289

BENNETT T. & GARDINER S.M. Neonatal treatment with capsaicin influences hormonal regulation of blood pressure in adult, water-deprived, Long Evans, but not Brattleboro, rats. (C) (T) 52*P*

BENNETT T. & GARDINER S.M. Changes in plasma volumes, electrolytes and osmolalities in response to water deprivation in female, Long Evans and Brattleboro rats. (C) (T) 52*P*

BENNS S.E., CANFIELD S.P. & CURWAIN B.P. Preparation of isolated cells from rat gastric mucosa. (D) 4*P*

BESSER G.M. *see* AL-DAMLUJI S., GROSSMAN A. & BESSER G.M. Central alpha-1 adrenoceptors stimulate ACTH secretion in man. (C) 45*P*

BIGLIN J.E.J. *see* ALDRIDGE M.C., BIGLIN J.E.J., CHADWICK S.J.D. & DUDLEY H.A.F. A method for the measurement of total hepatic blood flow in the anaesthetized rabbit. (D) 6*P*

BLACKSTOCK Elaine J., ELLORY J.C. & STEWART G.W. K influxes in red cells from two primate species. (C) 34*P*

BONDI Ardith Y., CHIARANDINI D.J. & JACOBY J. Induction of action potentials by denervation of tonic fibres in rat extraocular muscles. 165

BONE Q., PULSFORD A., RYAN K.P. & STOLINSKI C. Gap junctions between locomotor fibres in Sagitta (*Chaetognatha*). (D) (T) 16*P*

BOYETT M.R. & HART G. Dissociation between active force and intracellular sodium activity (a^i_{Na}) during the force staircase in isolated sheep Purkinje fibres. (C) 37*P*

BRITTON H.G. Student misconceptions of the bicarbonate buffer system. (D) 8*P*

BRITTON H.G. *see* TAN C.B., ALEXANDER D.P. & BRITTON H.G. Chemical sympathectomy *in utero* in the sheep. (D) (T) 16*P*

BRITTON H.G. *see* ALEXANDER D.P., BRITTON H.G., REDSTONE D. & TAN C.B. Assessment of fetal hypoxia using the sheep fetus as a model. (D) (T) 16*P*

BROWN A.G., NOBLE R. & ROWE M.J. Receptive field profiles and integrative properties of spinocervical tract cells in the cat. 335

BROWN J. & CORR L. Renal effects of atrial natriuretic peptide (ANP) in man. (C) 47*P*

BROWN M.D., HUDLICKA O. & SLOAN P.M.J. The effect of long-term bradycardial pacing on left ventricular capillary density and performance in vascularly compromised rabbit hearts. (C) 32*P*

BRUNER J., CZTERNASTY G., SHIMAHARA T. & STINNAKRE J. Arsenazo III transients and calcium current in a normally non-spiking neuronal soma of crayfish. 571

BURGER R.E., ESTAVILLO J.A., KUMAR P. & NYE P.C.G. The excitation of cat carotid body chemoreceptors by hyperkalaemia depends on P_{O_2} and P_{CO_2}. (C) 25*P*

BURROWS Colin F., MERRITT A.M. & TASH J. Jejunal myoelectrical activity in the conscious neonatal pig. 349

BUTT A.M. *see* ABBOTT N. Joan & BUTT A.M. A micro-electrode study of K^+ transport at the dogfish glial blood–brain barrier. (C) 29*P*

BYWATER Robert A.R. & TAYLOR Grahame S. Non-cholinergic excitatory and inhibitory junction potentials in the circular smooth muscle of the guinea-pig ileum. 153

CALLAHAN S.M. & CREED K.E. Non-cholinergic neurotransmission and the effects of peptides on the urinary bladder of guinea-pigs and rabbits. 103

CANFIELD S.P. & CURWAIN B.P. Measurement of gastric bicarbonate secretion in the presence of acid secretion in the anaesthetized rat. (D) 2*P*

CANFIELD S.P. & WHITE J.P.N. Duodenal alkalinization in a rat isolated duodenum preparation. (D) 3*P*

CANFIELD S.P. *see* BENNS S.E., CANFIELD S.P. & CURWAIN B.P. Preparation of isolated cells from rat gastric mucosa. (D) 4*P*

CANNELL M.B. & LEDERER W.J. The arrhythmogenic current I_{Ti} in the absence of electrogenic sodium–calcium exchange in sheep cardiac Purkinje fibres. 201

CASE C.P. & MATTHEWS Margaret R. Outgoing synapses of small granule-containing cells in the rat superior cervical ganglion after post-ganglionic axotomy. 1

CASE C.P. & MATTHEWS Margaret R. Incoming synapses and size of small granule-containing cells in a rat sympathetic ganglion after post-ganglionic axotomy. 33

CASSELL J.F. & MCLACHLAN Elspeth M. The effect of a transient outward current (I_A) on synaptic potentials in sympathetic ganglion cells of the guinea-pig. 273

CHADWICK S.J.D. *see* ALDRIDGE M.C., BIGLIN J.E.J., CHADWICK S.J.D. & DUDLEY H.A.F. A method for the measurement of total hepatic blood flow in the anaesthetized rabbit. (D) 6*P*

CHAN A.B., PRICE C.A. & SYKES K.J. Measurement of thromboxane release from rat isolated gastric mucosal cells. (C) 46*P*

CHAN S.T.F., FORD D., MCLAUGHLIN S.J. & NEAME S.J. Computerized displacement transducer for quantifying muscle weakness and fatigue in surgical patients. (D) 13*P*

CHIARANDINI D.J. *see* BONDI Ardith Y., CHIARANDINI D.J. & JACOBY J. Induction of action potentials by denervation of tonic fibres in rat extraocular muscles. 165

CHRISTOPOULOS D. & NICOLAIDES A.N. Air plethysmography in the assessment of the calf muscle pump in man. (D) 11*P*

CLARKE D.N. *see* ATKINS A., CLARKE D.N., JONES J., POWELL J., SAPSFORD R.N., SIBS J.A., STANBRIDGE R. DE L. & SYMONS G.V. Changes of erythrocyte deformability during cardiac by-pass surgery in man. (C) 50*P*

CLOUGH Geraldine & MICHEL C.C. Comparisons between the hydraulic conductance of the walls of single frog capillaries and the ultrastructure of the intercellular clefts. (D) 12*P*

CLOUGH Geraldine, HEAD S.D. & MICHEL C.C. Measurements of electrical resistance and hydraulic conductivity in single frog capillaries. (D) (T) 16*P*

CLOUGH Geraldine, NOOR Noriah & SMAJE L.H. Effect of inflammatory mediators on the developing microcirculation of the rabbit ear chamber. (C) 17*P*

CLOUGH Geraldine, MICHEL C.C. & TURNER M.R. Effects of chemical fixation on the permeability of frog mesenteric capillaries. (C) 18*P*

COHEN I.S. *see* BALDO G.J., COHEN I.S. & VAN DER KLOOT W. Estimating the time course of evoked quantal release at the frog neuromuscular junction using end-plate current latencies. 503

COLLINGRIDGE G.L., HERRON C.E. & LESTER R.A.J. Demonstration of a NMDA receptor-mediated component of synaptic transmission during tetanic stimulation in isolated rat hippocampal slices. (C) 41*P*

CONRADSON T.-B.G. *see* BARNES P.J., CONRADSON T.-B.G., DIXON C.M.S., FULLER R.W. & MAXWELL D.L. Effect of infused adenosine on cardiovascular and airway function in conscious man. (C) 22*P*

CONRADSON T.-B.G. *see* BARNES P.J., CONRADSON T.-B.G., DIXON C.M.S. & FULLER R.W. A comparison of the cutaneous actions of substance P, neurokinin A and calcitonin gene-related peptide in man. (C) 48*P*

CORR L. *see* BROWN J. & CORR L. Renal effects of atrial natriuretic peptide (ANP) in man. (C) 47*P*

COWBURN R. *see* BARTON Amanda, COWBURN R., ELLIOT M. & HARDY J. The use of cell harvesters to study the kinetics of active uptake and receptor binding. (D) (T) 16*P*

CREED K.E. *see* CALLAHAN S.M. & CREED K.E. Non-cholinergic neurotransmission and the effects of peptides on the urinary bladder of guinea-pigs and rabbits. 103

CREESE R., HEAD S.D. & JENKINSON D.F. Guinea-pig diaphragm and spontaneous recovery from depolarizing drugs *in vitro*: effect of potassium-free solution. (C) 43*P*

CULL-CANDY S.G. Miniature and evoked inhibitory junctional currents and γ-aminobutyric acid-activated current noise in locust muscle fibres. 179

CULLING W., FLORES N.A., SHERIDAN D.J. & THOMAS P. A microcomputer system for measurement of coronary blood flow in man. (D) 14*P*

CULLING W., FLORES N.A., SHERIDAN D.J. & THOMAS P. A microcomputer system for analysis of coronary artery calibre. (D) 15*P*

CULLING W., GRIFFITHS B.E., SHERIDAN D.J., SINGH H. & THOMAS P. Effects of alpha$_1$ adrenoceptor blockade on the coronary haemodynamic responses to atrial pacing in patients with coronary artery disease. (C) 31*P*

CURWAIN B.P. *see* CANFIELD S.P. & CURWAIN B.P. Measurement of gastric bicarbonate secretion in the presence of acid secretion in the anaesthetized rat. (D) 2*P*

CURWAIN B.P. *see* BENNS S.E., CANFIELD S.P. & CURWAIN B.P. Preparation of isolated cells from rat gastric mucosa. (D) 4*P*

CZTERNASTY G. *see* BRUNER J., CZTERNASTY G., SHIMAHARA T. & STINNAKRE J. Arsenazo III transients and calcium current in a normally non-spiking neuronal soma of crayfish. 571

DIXON C.M.S. *see* BARNES P.J., CONRADSON T.-B.G., DIXON C.M.S., FULLER R.W. & MAXWELL D.L. Effect of infused adenosine on cardiovascular and airway function in conscious man. (C) 22*P*

DIXON C.M.S. *see* BARNES P.J., CONRADSON T.-B.G., DIXON C.M.S. & FULLER R.W. A comparison of the cutaneous actions of substance P, neurokinin A and calcitonin gene-related peptide in man. (C) 48*P*

DOLLERY C.M. & v. GRAFENSTEIN H.R.K. The general anaesthetic urethane inhibits evoked catecholamine secretion and calcium uptake in cultured bovine adrenal medullary cells. (C) 40*P*

DUDLEY H.A.F. *see* ALDRIDGE M.C., BIGLIN J.E.J., CHADWICK S.J.D. & DUDLEY H.A.F. A method for the measurement of total hepatic blood flow in the anaesthetized rabbit. (D) 6*P*

EACOTT D.W. *see* BECKET A.J., EACOTT D.W., GOLDBERG P.L., SEVER P.S. & THOM S. A vacuum chamber for the application of lower-body negative pressure to human subjects. (D) 10*P*

EDEN G.J. & HANSON M.A. Effect of hyperoxia from birth on the carotid chemoreceptor and ventilatory responses of rats to acute hypoxia. (C) 24P

EDWARDS R.J. & NEWMAN C.P. Isokinetic strength and endurance and the operation of foot pedals in man. (C) 51P

ELLIOT M. *see* BARTON Amanda, COWBURN R., ELLIOT M. & HARDY J. The use of cell harvesters to study the kinetics of active uptake and receptor binding. (D) (T) 16P

ELLORY J.C., HALL A.C. & STEWART G.W. Volume-sensitive KCl transport in human red cells. (C) 33P

ELLORY J.C. *see* BLACKSTOCK Elaine J., ELLORY J.C. & STEWART G.W. K influxes in red cells from two primate species. (C) 34P

ESTAVILLO J.A. *see* BURGER R.E., ESTAVILLO J.A., KUMAR P. & NYE P.C.G. The excitation of cat carotid body chemoreceptors by hyperkalaemia depends on P_{O_2} and P_{CO_2}. (C) 25P

FILLENZ Marianne & O'NEILL Robert D. Effects of light reversal on the circadian pattern of motor activity and voltammetric signals recorded in rat forebrain. 91

FLORES N.A. *see* CULLING W., FLORES N.A., SHERIDAN D.J. & THOMAS P. A microcomputer system for measurement of coronary blood flow in man. (D) 14P

FLORES N.A. *see* CULLING W., FLORES N.A., SHERIDAN D.J. & THOMAS P. A microcomputer system for analysis of coronary artery calibre. (D) 15P

FORD D. *see* CHAN S.T.F., FORD D., MCLAUGHLIN S.J. & NEAME S.J. Computerized displacement transducer for quantifying muscle weakness and fatigue in surgical patients. (D) 13P

FOSTER C.L. *see* ALEXANDER D. Pauline, FOSTER C.L. & TAN C.B. Localization of Tamm-Horsfall glycoprotein in the nephron of the human, rat and hamster kidney as shown by light and electron microscopy. (D) (T) 16P

FUGELLI Kjell & THOROED Steinar M. Taurine transport associated with cell volume regulation in flounder erythrocytes under anisosmotic conditions. 245

FULLER R.W. *see* BARNES P.J., CONRADSON T.-B.G., DIXON C.M.S., FULLER R.W. & MAXWELL D.L. Effect of infused adenosine on cardiovascular and airway function in conscious man. (C) 22P

FULLER R.W. *see* BARNES P.J., CONRADSON T.-B.G., DIXON C.M.S. & FULLER R.W. A comparison of the cutaneous actions of substance P, neurokinin A and calcitonin gene-related peptide in man. (C) 48P

GALLAGHER J.P. *see* AKASU T., GALLAGHER J.P., HIRAI K. & SHINNICK-GALLAGHER P. Vasoactive intestinal polypeptide depolarizations in cat bladder parasympathetic ganglia. 457

GALLER Stefan & MOSER Hans The ionic mechanism of intracellular pH regulation in crayfish muscle fibres. 137

GARDINER S.M. *see* BENNETT T. & GARDINER S.M. Neonatal treatment with capsaicin influences hormonal regulation of blood pressure in adult, water-deprived, Long Evans, but not Brattleboro, rats. (C) (T) 52P

GARDINER S.M. *see* BENNETT T. & GARDINER S.M. Changes in plasma volumes, electrolytes and osmolalities in response to water deprivation in female, Long Evans and Brattleboro rats. (C) (T) 52P

GOLDBERG P.L. *see* BECKET A.J., EACOTT D.W., GOLDBERG P.L., SEVER P.S. & THOM S. A vacuum chamber for the application of lower-body negative pressure to human subjects. (D) 10P

GORDON Tessa, STEIN Richard B. & THOMAS Christine K. Innervation and function of hind-limb muscles in the cat after cross-union of the tibial and peroneal nerves. 429

GORDON Tessa, STEIN Richard B. & THOMAS Christine K. Organization of motor units following cross-reinnervation of antagonistic muscles in the cat hind limb. 443

GREENWOOD J., LANTOS P.L., LUTHERT P.J. & PRATT O.E. Hyperosmolar opening of the rat blood–brain barrier in the absence of energy-producing metabolism. (C) 19P

GRIFFITHS B.E. *see* CULLING W., GRIFFITHS B.E., SHERIDAN D.J., SINGH H. & THOMAS P. Effects of alpha$_1$ adrenoceptor blockade on the coronary haemodynamic responses to atrial pacing in patients with coronary artery disease. (C) 31P

GROSSMAN A. *see* AL-DAMLUJI S., GROSSMAN A. & BESSER G.M. Central alpha-1 adrenoceptors stimulate ACTH secretion in man. (C) 45P

HALL A.C. *see* ELLORY J.C., HALL A.C. & STEWART G.W. Volume-sensitive KCl transport in human red cells. (C) 33P

HAM I.W., MATHIAS C.J., MAY C.N. & STONE F.A. Effect of pentobarbitone, phenoxybenzamine and adrenalectomy on the morphine-induced increase in blood pressure in rabbits. (C) 49P

HANSON M.A. *see* EDEN G.J. & HANSON M.A. Effect of hyperoxia from birth on the carotid chemoreceptor and ventilatory responses of rats to acute hypoxia. (C) 24P

HARDY J. *see* BARTON Amanda, COWBURN R., ELLIOT M. & HARDY J. The use of cell harvesters to study the kinetics of active uptake and receptor binding. (D) (T) 16*P*

HART G. *see* BOYETT M.R. & HART G. Dissociation between active force and intracellular sodium activity (a_{Na}^i) during the force staircase in isolated sheep Purkinje fibres. (C) 37*P*

HAYES R.J. & IDLE J.R. The isolated vas deferens of the whale: responses to electrical stimulation and drugs. (C) 44*P*

HEAD S.D. *see* CLOUGH Geraldine, HEAD S.D. & MICHEL C.C. Measurements of electrical resistance and hydraulic conductivity in single frog capillaries. (D) (T) 16*P*

HEAD S.D. Tritiated-inositol uptake by the isolated phrenic nerve diaphragm of rat: lack of effect of nerve activity. (C) 42*P*

HEAD S.D. *see* CREESE R., HEAD S.D. & JENKINSON D.F. Guinea-pig diaphragm and spontaneous recovery from depolarizing drugs *in vitro*: effect of potassium-free solution. (C) 43*P*

HERRON C.E. *see* COLLINGRIDGE G.L., HERRON C.E. & LESTER R.A.J. Demonstration of a NMDA receptor-mediated component of synaptic transmission during tetanic stimulation in isolated rat hippocampal slices. (C) 41*P*

HIRAI K. *see* AKASU T., GALLAGHER J.P., HIRAI K. & SHINNICK-GALLAGHER P. Vasoactive intestinal polypeptide depolarizations in cat bladder parasympathetic ganglia. 457

HUDLICKA O. *see* BROWN M.D., HUDLICKA O. & SLOAN P.M.J. The effect of long-term bradycardial pacing on left ventricular capillary density and performance in vascularly compromised rabbit hearts. (C) 32*P*

HUGHES A., REDMAN D., SEVER P. & THOM S. Dopamine-induced vasodilatation in the human forearm is not mediated by β-adrenoceptors. (C) 27*P*

HULTMAN Eric & SPRIET Lawrence L. Skeletal muscle metabolism, contraction force and glycogen utilization during prolonged electrical stimulation in humans. 493

HUNDAL H.S. *see* BABIJ P., HUNDAL H.S., RENNIE M.J. & WATT P.W. Effects of corticosteroid on glutamine transport in rat skeletal muscle. (C) 35*P*

IDLE J.R. *see* HAYES R.J. & IDLE J.R. The isolated vas deferens of the whale: responses to electrical stimulation and drugs. (C) 44*P*

IGGULDEN H.L.A. *see* ALLEN J.M., IGGULDEN H.L.A. & MCHALE N.G. β-adrenergic inhibition of bovine mesenteric lymphatics. 401

JACOBY J. *see* BONDI Ardith Y., CHIARANDINI D.J. & JACOBY J. Induction of action potentials by denervation of tonic fibres in rat extraocular muscles. 165

JENKINSON D.F. *see* CREESE R., HEAD S.D. & JENKINSON D.F. Guinea-pig diaphragm and spontaneous recovery from depolarizing drugs *in vitro*: effect of potassium-free solution. (C) 43*P*

JONES J. *see* ATKINS A., CLARKE D.N., JONES J., POWELL J., SAPSFORD R.N., SIRS J.A., STANBRIDGE R. DE L. & SYMONS G.V. Changes of erythrocyte deformability during cardiac by-pass surgery in man. (C) 50*P*

KARMAKAR Nivedita & LEVER M.J. The effect of high-molecular-weight polymers on fluid flux through the wall of the rabbit common carotid artery. (C) 21*P*

KATZ Bernard Erratum: *Journal of Physiology* **370** (1986). 585

KREULEN D.L. & PETERS S. Non-cholinergic transmission in a sympathetic ganglion of the guinea-pig elicited by colon distension. 315

KREYE V.A.W. & WESTON A.H. BRL 34915-induced stimulation of ^{86}Rb efflux in rabbit aorta and its dependence on calcium. (C) 36*P*

KUBA K. & KUMAMOTO E. Long-term potentiation of transmitter release induced by adrenaline in bull-frog sympathetic ganglia. 515

KULLBERG R. & OWENS J.L. Comparative development of end-plate currents in two muscles of *Xenopus laevis*. 413

KUMAMOTO E. *see* KUBA K. & KUMAMOTO E. Long-term potentiation of transmitter release induced by adrenaline in bull-frog sympathetic ganglia. 515

KUMAR P. *see* BURGER R.E., ESTAVILLO J.A., KUMAR P. & NYE P.C.G. The excitation of cat carotid body chemoreceptors by hyperkalaemia depends on P_{O_2} and P_{CO_2}. (C) 25*P*

LANTOS P.L. *see* GREENWOOD J., LANTOS P.L., LUTHERT P.J. & PRATT O.E. Hyperosmolar opening of the rat blood–brain barrier in the absence of energy-producing metabolism. (C) 19*P*

LEDERER W.J. *see* CANNELL M.B. & LEDERER W.J. The arrhythmogenic current I_{TI} in the absence of electrogenic sodium–calcium exchange in sheep cardiac Purkinje fibres. 201

LESTER R.A.J. *see* COLLINGRIDGE G.L., HERRON C.E. & LESTER R.A.J. Demonstration of a NMDA receptor-mediated component of synaptic transmission during tetanic stimulation in isolated rat hippocampal slices. (C) 41*P*

LEVER M.J. *see* KARMAKAR Nivedita & LEVER M.J. The effect of high-molecular-weight polymers on fluid flux through the wall of the rabbit common carotid artery. (C) 21*P*

LITTLE Hilary J. & THOMAS D.L. The effects of anaesthetics and high pressure on the responses of the rat superior cervical ganglion *in vitro*. 387

LOW P.A., SCHMELZER J.D. & WARD K.K. The effect of age on energy metabolism and resistance to ischaemic conduction failure in rat peripheral nerve. 263

LUTHERT P.J. *see* GREENWOOD J., LANTOS P.L., LUTHERT P.J. & PRATT O.E. Hyperosmolar opening of the rat blood–brain barrier in the absence of energy-producing metabolism. (C) 19*P*

MCCULLOCH J. & REID J. The effect of capsaicin on blood–brain barrier permeability in the rat. (C) 20*P*

MCGEOWN J.G., MCHALE N.G., PIPPARD Corinna, RODDIE I.C. & THORNBURY K.D. The effect of local exposure to sub-atmospheric pressure on lymph production in sheep limbs. (C) 30*P*

MCHALE N.G. *see* ALLEN J.M., IGGULDEN H.L.A. & MCHALE N.G. β-adrenergic inhibition of bovine mesenteric lymphatics. 401

MCHALE N.G. *see* MCGEOWN J.G., MCHALE N.G., PIPPARD Corinna, RODDIE I.C. & THORNBURY K.D. The effect of local exposure to sub-atmospheric pressure on lymph production in sheep limbs. (C) 30*P*

MCLACHLAN Elspeth M. *see* CASSELL J.F. & MCLACHLAN Elspeth M. The effect of a transient outward current (I_A) on synaptic potentials in sympathetic ganglion cells of the guinea-pig. 273

MCLAUGHLIN S.J. *see* CHAN S.T.F., FORD D., MCLAUGHLIN S.J. & NEAME S.J. Computerized displacement transducer for quantifying muscle weakness and fatigue in surgical patients. (D) 13*P*

MASKREY M. & TRENCHARD D. Role of the vagus nerves in the respiratory response to intravenous acid infusion in the anaesthetized rabbit. (C) 26*P*

MATHIAS C.J. *see* HAM I.W., MATHIAS C.J., MAY C.N. & STONE F.A. Effect of pentobarbitone, phenoxybenzamine and adrenalectomy on the morphine-induced increase in blood pressure in rabbits. (C) 49*P*

MATTHEWS Margaret R. *see* CASE C.P. & MATTHEWS Margaret R. Outgoing synapses of small granule-containing cells in the rat superior cervical ganglion after post-ganglionic axotomy. 1

MATTHEWS Margaret R. *see* CASE C.P. & MATTHEWS Margaret R. Incoming synapses and size of small granule-containing cells in a rat sympathetic ganglion after post-ganglionic axotomy. 33

MATTHEWS Peter B.C. Observations on the automatic compensation of reflex gain on varying the pre-existing level of motor discharge in man. 73

MAXWELL D.L. *see* BARNES P.J., CONRADSON T.-B.G., DIXON C.M.S., FULLER R.W. & MAXWELL D.L. Effect of infused adenosine on cardiovascular and airway function in conscious man. (C) 22*P*

MAXWELL D.L. Effect of adenosine infusion on resting ventilation in man. (C) 23*P*

MAY C.N. *see* HAM I.W., MATHIAS C.J., MAY C.N. & STONE F.A. Effect of pentobarbitone, phenoxybenzamine and adrenalectomy on the morphine-induced increase in blood pressure in rabbits. (C) 49*P*

MERRITT A.M. *see* BURROWS Colin F., MERRITT A.M. & TASH J. Jejunal myoelectrical activity in the conscious neonatal pig. 349

MICHEL C.C. *see* CLOUGH Geraldine & MICHEL C.C. Comparisons between the hydraulic conductance of the walls of single frog capillaries and the ultrastructure of the intercellular clefts. (D) 12*P*

MICHEL C.C. & MOYSES C. The measurement of tissue swelling rates in human limbs. (D) (T) 16*P*

MICHEL C.C. *see* CLOUGH Geraldine, HEAD S.D. & MICHEL C.C. Measurements of electrical resistance and hydraulic conductivity in single frog capillaries. (D) (T) 16*P*

MICHEL C.C. *see* CLOUGH Geraldine, MICHEL C.C. & TURNER M.R. Effects of chemical fixation on the permeability of frog mesenteric capillaries. (C) 18*P*

MILEDI R., PARKER I. & SUMIKAWA K. Calcium channels expressed in *Xenopus* oocytes by mRNA from rat brain. (C) 38*P*

MOSER Hans *see* GALLER Stefan & MOSER Hans The ionic mechanism of intracellular pH regulation in crayfish muscle fibres. 137

MOYSES C. *see* MICHEL C.C. & MOYSES C. The measurement of tissue swelling rates in human limbs. (D) (T) 16*P*

NAKAZATO Y., OHGA A. & YAMADA Y. Facilitation of transmitter action on catecholamine output by cardiac glycoside in perfused adrenal gland of guinea-pig. 475

NEAME S.J. *see* CHAN S.T.F., FORD D., MCLAUGHLIN S.J. & NEAME S.J. Computerized displacement transducer for quantifying muscle weakness and fatigue in surgical patients. (D) 13*P*

NEWMAN C.P. *see* EDWARDS R.J. & NEWMAN C.P. Isokinetic strength and endurance and the operation of foot pedals in man. (C) 51*P*

NICOLAIDES A.N. *see* CHRISTOPOULOS D. & NICOLAIDES A.N. Air plethysmography in the assessment of the calf muscle pump in man. (D) 11*P*

NOBLE R. *see* BROWN A.G., NOBLE R. & ROWE M.J. Receptive field profiles and integrative properties of spinocervical tract cells in the cat. 335

NOOR NORIAH *see* CLOUGH GERALDINE, NOOR NORIAH & SMAJE L.H. Effect of inflammatory mediators on the developing microcirculation of the rabbit ear chamber. (C) 17*P*

NYE P.C.G. *see* BURGER R.E., ESTAVILLO J.A., KUMAR P. & NYE P.C.G. The excitation of cat carotid body chemoreceptors by hyperkalaemia depends on P_{O_2} and P_{CO_2}. (C) 25*P*

OHGA A. *see* NAKAZATO Y., OHGA A. & YAMADA Y. Facilitation of transmitter action on catecholamine output by cardiac glycoside in perfused adrenal gland of guinea-pig. 475

O'NEILL ROBERT D. *see* FILLENZ MARIANNE & O'NEILL ROBERT D. Effects of light reversal on the circadian pattern of motor activity and voltammetric signals recorded in rat forebrain. 91

OSWALDO-CRUZ E., PICANÇO-DINIZ C.W. & SILVEIRA L.C.L. Quantitative analysis of the retinal ganglion cell size in Amazon rodents. (C) 39*P*

OWENS J.L. *see* KULLBERG R. & OWENS J.L. Comparative development of end-plate currents in two muscles of *Xenopus laevis*. 413

PARKER I. *see* MILEDI R., PARKER I. & SUMIKAWA K. Calcium channels expressed in *Xenopus* oocytes by mRNA from rat brain. (C) 38*P*

PECKHAM MICHELLE & WOLEDGE R.C. Labile heat and changes in rate of relaxation of frog muscles. 123

PETERS S. *see* KREULEN D.L. & PETERS S. Non-cholinergic transmission in a sympathetic ganglion of the guinea-pig elicited by colon distension. 315

PICANÇO-DINIZ C.W. *see* OSWALDO-CRUZ E., PICANÇO-DINIZ C.W. & SILVEIRA L.C.L. Quantitative analysis of the retinal ganglion cell size in Amazon rodents. (C) 39*P*

PIPPARD CORINNA *see* MCGEOWN J.G., MCHALE N.G., PIPPARD CORINNA, RODDIE I.C. & THORNBURY K.D. The effect of local exposure to sub-atmospheric pressure on lymph production in sheep limbs. (C) 30*P*

POWELL J. *see* ATKINS A., CLARKE D.N., JONES J., POWELL J., SAPSFORD R.N., SIBS J.A., STANBRIDGE R. DE L. & SYMONS G.V. Changes of erythrocyte deformability during cardiac by-pass surgery in man. (C) 50*P*

PRATT O.E. *see* GREENWOOD J., LANTOS P.L., LUTHERT P.J. & PRATT O.E. Hyperosmolar opening of the rat blood–brain barrier in the absence of energy-producing metabolism. (C) 19*P*

PRICE C.A. *see* CHAN A.B., PRICE C.A. & SYKES K.J. Measurement of thromboxane release from rat isolated gastric mucosal cells. (C) 46*P*

PULSFORD A. *see* BONE Q., PULSFORD A., RYAN K.P. & STOLINSKI C. Gap junctions between locomotor fibres in Sagitta (*Chaetognatha*). (D) (T) 16*P*

RAMPLING M.W. & WHITTINGSTALL P. Rouleaux formation (D) (T) 16*P*

RANDALL N.J. *see* BEARD R.W., RANDALL N.J., REGINALD P.W., SUTHERLAND I.A. & WERTHEIM D.F.P. Postural changes in pelvic blood flow in women. (D) 9*P*

REDMAN D. *see* HUGHES A., REDMAN D., SEVER P. & THOM S. Dopamine-induced vasodilatation in the human forearm is not mediated by β-adrenoceptors. (C) 27*P*

REDSTONE D. *see* ALEXANDER D.P., BRITTON H.G., REDSTONE D. & TAN C.B. Assessment of fetal hypoxia using the sheep fetus as a model. (D) (T) 16*P*

REGINALD P.W. *see* BEARD R.W., RANDALL N.J., REGINALD P.W., SUTHERLAND I.A. & WERTHEIM D.F.P. Postural changes in pelvic blood flow in women. (D) 9*P*

REID J. *see* MCCULLOCH J. & REID J. The effect of capsaicin on blood–brain barrier permeability in the rat. (C) 20*P*

RENNIE M.J. *see* BABIJ P., HUNDAL H.S., RENNIE M.J. & WATT P.W. Effects of corticosteroid on glutamine transport in rat skeletal muscle. (C) 35*P*

RODDIE I.C. *see* MCGEOWN J.G., MCHALE N.G., PIPPARD CORINNA, RODDIE I.C. & THORNBURY K.D. The effect of local exposure to sub-atmospheric pressure on lymph production in sheep limbs. (C) 30*P*

RORSMAN P. & TRUBE G. Calcium and delayed potassium currents in mouse pancreatic β-cells under voltage-clamp conditions. 531

ROWE M.J. *see* BROWN A.G., NOBLE R. & ROWE M.J. Receptive field profiles and integrative properties of spinocervical tract cells in the cat. 335

RYAN K.P. *see* BONE Q., PULSFORD A., RYAN K.P. & STOLINSKI C. Gap junctions between locomotor fibres in Sagitta (*Chaetognatha*). (D) (T) 16*P*

SACHS J.R. Potassium–potassium exchange as part of the over-all reaction mechanism of the sodium pump of the human red blood cell. 221

SAPSFORD R.N. *see* ATKINS A., CLARKE D.N., JONES J., POWELL J., SAPSFORD R.N., SIRS J.A., STANBRIDGE R. DE L. & SYMONS G.V. Changes of erythrocyte deformability during cardiac by-pass surgery in man. (C) 50*P*

SCHACHER Samuel *see* BELARDETTI Francesco, SCHACHER Samuel & SIEGELBAUM Steven A. Action potentials, macroscopic and single channel currents recorded from growth cones of *Aplysia* neurones in culture. 289

SCHMELZER J.D. *see* LOW P.A., SCHMELZER J.D. & WARD K.K. The effect of age on energy metabolism and resistance to ischaemic conduction failure in rat peripheral nerve. 263

SEVER P. *see* HUGHES A., REDMAN D., SEVER P. & THOM S. Dopamine-induced vasodilatation in the human forearm is not mediated by β-adrenoceptors. (C) 27*P*

SEVER P.S. *see* BECKET A.J., EACOTT D.W., GOLDBERG P.L., SEVER P.S. & THOM S. A vacuum chamber for the application of lower-body negative pressure to human subjects. (D) 10*P*

SHERIDAN D.J. *see* CULLING W., FLORES N.A., SHERIDAN D.J. & THOMAS P. A microcomputer system for measurement of coronary blood flow in man. (D) 14*P*

SHERIDAN D.J. *see* CULLING W., FLORES N.A., SHERIDAN D.J. & THOMAS P. A microcomputer system for analysis of coronary artery calibre. (D) 15*P*

SHERIDAN D.J. *see* CULLING W., GRIFFITHS B.E., SHERIDAN D.J., SINGH H. & THOMAS P. Effects of alpha$_1$ adrenoceptor blockade on the coronary haemodynamic responses to atrial pacing in patients with coronary artery disease. (C) 31*P*

SHIMAHARA T. *see* BRUNER J., CZTERNASTY G., SHIMAHARA T. & STINNAKRE J. Arsenazo III transients and calcium current in a normally non-spiking neuronal soma of crayfish. 571

SHINNICK-GALLAGHER P. *see* AKASU T., GALLAGHER J.P., HIRAI K. & SHINNICK-GALLAGHER P. Vasoactive intestinal polypeptide depolarizations in cat bladder parasympathetic ganglia. 457

SIEGELBAUM Steven A. *see* BELARDETTI Francesco, SCHACHER Samuel & SIEGELBAUM Steven A. Action potentials, macroscopic and single channel currents recorded from growth cones of *Aplysia* neurones in culture. 289

SILVEIRA L.C.L. *see* OSWALDO-CRUZ E., PICANÇO-DINIZ C.W. & SILVEIRA L.C.L. Quantitative analysis of the retinal ganglion cell size in Amazon rodents. (C) 39*P*

SINGH H. *see* CULLING W., GRIFFITHS B.E., SHERIDAN D.J., SINGH H. & THOMAS P. Effects of alpha$_1$ adrenoceptor blockade on the coronary haemodynamic responses to atrial pacing in patients with coronary artery disease. (C) 31*P*

SIRS J.A. The erythrocyte settling rate (ESR). (D) 5*P*

SIRS J.A. *see* ATKINS A., CLARKE D.N., JONES J., POWELL J., SAPSFORD R.N., SIRS J.A., STANBRIDGE R. DE L. & SYMONS G.V. Changes of erythrocyte deformability during cardiac by-pass surgery in man. (C) 50*P*

SLOAN P.M.J. *see* BROWN M.D., HUDLICKA O. & SLOAN P.M.J. The effect of long-term bradycardial pacing on left ventricular capillary density and performance in vascularly compromised rabbit hearts. (C) 32*P*

SMAJE L.H. *see* CLOUGH Geraldine, NOOR Noriah & SMAJE L.H. Effect of inflammatory mediators on the developing microcirculation of the rabbit ear chamber. (C) 17*P*

SMITH P.M. Measurement of ventilation using a microcomputer. (D) 7*P*

SPRIET Lawrence L. *see* HULTMAN Eric & SPRIET Lawrence L. Skeletal muscle metabolism, contraction force and glycogen utilization during prolonged electrical stimulation in humans. 493

STANBRIDGE R. DE L. *see* ATKINS A., CLARKE D.N., JONES J., POWELL J., SAPSFORD R.N., SIRS J.A., STANBRIDGE R. DE L. & SYMONS G.V. Changes of erythrocyte deformability during cardiac by-pass surgery in man. (C) 50*P*

STEIN Richard B. *see* GORDON Tessa, STEIN Richard B. & THOMAS Christine K. Innervation and function of hind-limb muscles in the cat after cross-union of the tibial and peroneal nerves. 429

STEIN Richard B. *see* GORDON Tessa, STEIN Richard B. & THOMAS Christine K. Organization of motor units following cross-reinnervation of antagonistic muscles in the cat hind limb. 443

STEWART G.W. *see* ELLORY J.C., HALL A.C. & STEWART G.W. Volume-sensitive KCl transport in human red cells. (C) 33*P*

STEWART G.W. *see* BLACKSTOCK Elaine J., ELLORY J.C. & STEWART G.W. K influxes in red cells from two primate species. (C) 34*P*

STINNAKRE J. *see* BRUNER J., CZTERNASTY G., SHIMAHARA T. & STINNAKRE J. Arsenazo III transients and calcium current in a normally non-spiking neuronal soma of crayfish. 571

STINNAKRE Jacques & VAN RENTERGHEM Catherine Cyclic adenosine monophosphate, calcium, acetylcholine and the current induced by adenosine in the *Xenopus* oocyte. 551

STOLINSKI C. *see* BONE Q., PULSFORD A., RYAN K.P. & STOLINSKI C. Gap junctions between locomotor fibres in Sagitta (*Chaetognatha*). (D) (T) 16*P*

STONE F.A. *see* HAM I.W., MATHIAS C.J., MAY C.N. & STONE F.A. Effect of pentobarbitone, phenoxybenzamine and adrenalectomy on the morphine-induced increase in blood pressure in rabbits. (C) 49*P*

SUMIKAWA K. *see* MILEDI R., PARKER I. & SUMIKAWA K. Calcium channels expressed in *Xenopus* oocytes by mRNA from rat brain. (C) 38*P*

SUTHERLAND I.A. *see* BEARD R.W., RANDALL N.J., REGINALD P.W., SUTHERLAND I.A. & WERTHEIM D.F.P. Postural changes in pelvic blood flow in women. (D) 9*P*

SYKES K.J. *see* CHAN A.B., PRICE C.A. & SYKES K.J. Measurement of thromboxane release from rat isolated gastric mucosal cells. (C) 46*P*

SYMONS G.V. *see* ATKINS A., CLARKE D.N., JONES J., POWELL J., SAPSFORD R.N., SIRS J.A., STANBRIDGE R. DE L. & SYMONS G.V. Changes of erythrocyte deformability during cardiac by-pass surgery in man. (C) 50*P*

TAN C.B., ALEXANDER D.P. & BRITTON H.G. Chemical sympathectomy *in utero* in the sheep. (D) (T) 16*P*

TAN C.B. *see* ALEXANDER D.P., BRITTON H.G., REDSTONE D. & TAN C.B. Assessment of fetal hypoxia using the sheep fetus as a model. (D) (T) 16*P*

TAN C.B. *see* ALEXANDER D. Pauline, FOSTER C.L. & TAN C.B. Localization of Tamm-Horsfall glycoprotein in the nephron of the human, rat and hamster kidney as shown by light and electron microscopy. (D) (T) 16*P*

TASH J. *see* BURROWS Colin F., MERRITT A.M. & TASH J. Jejunal myoelectrical activity in the conscious neonatal pig. 349

TAYLOR Grahame S. *see* BYWATER Robert A.R. & TAYLOR Grahame S. Non-cholinergic excitatory and inhibitory junction potentials in the circular smooth muscle of the guinea-pig ileum. 153

THOMAS Christine K. *see* GORDON Tessa, STEIN Richard B. & THOMAS Christine K. Innervation and function of hind-limb muscles in the cat after cross-union of the tibial and peroneal nerves. 429

THOMAS Christine K. *see* GORDON Tessa, STEIN Richard B. & THOMAS Christine K. Organization of motor units following cross-reinnervation of antagonistic muscles in the cat hind limb. 443

THOMAS D.L. *see* LITTLE Hilary J. & THOMAS D.L. The effects of anaesthetics and high pressure on the responses of the rat superior cervical ganglion *in vitro*. 387

THOMAS P. *see* CULLING W., FLORES N.A., SHERIDAN D.J. & THOMAS P. A microcomputer system for measurement of coronary blood flow in man. (D) 14*P*

THOMAS P. *see* CULLING W., FLORES N.A., SHERIDAN D.J. & THOMAS P. A microcomputer system for analysis of coronary artery calibre. (D) 15*P*

THOMAS P. *see* CULLING W., GRIFFITHS B.E., SHERIDAN D.J., SINGH H. & THOMAS P. Effects of alpha$_1$ adrenoceptor blockade on the coronary haemodynamic responses to atrial pacing in patients with coronary artery disease. (C) 31*P*

THOM S. *see* BECKET A.J., EACOTT D.W., GOLDBERG P.L., SEVER P.S. & THOM S. A vacuum chamber for the application of lower-body negative pressure to human subjects. (D) 10*P*

THOM S. *see* HUGHES A., REDMAN D., SEVER P. & THOM S. Dopamine-induced vasodilatation in the human forearm is not mediated by β-adrenoceptors. (C) 27*P*

THORNBURY K.D. *see* MCGEOWN J.G., MCHALE N.G., PIPPARD Corinna, RODDIE I.C. & THORNBURY K.D. The effect of local exposure to sub-atmospheric pressure on lymph production in sheep limbs. (C) 30*P*

THOROED Steinar M. *see* FUGELLI Kjell & THOROED Steinar M. Taurine transport associated with cell volume regulation in flounder erythrocytes under anisosmotic conditions. 245

TRENCHARD D. *see* MASKREY M. & TRENCHARD D. Role of the vagus nerves in the respiratory response to intravenous acid infusion in the anaesthetized rabbit. (C) 26*P*

TRUBE G. *see* RORSMAN P. & TRUBE G. Calcium and delayed potassium currents in mouse pancreatic β-cells under voltage-clamp conditions. 531

TURNER M.R. *see* CLOUGH Geraldine, MICHEL C.C. & TURNER M.R. Effects of chemical fixation on the permeability of frog mesenteric capillaries. (C) 18*P*

VAN DER KLOOT W. *see* BALDO G.J., COHEN I.S. & VAN DER KLOOT W. Estimating the time course of evoked quantal release at the frog neuromuscular junction using end-plate current latencies. 503

VAN RENTERGHEM Catherine *see* STINNAKRE Jacques & VAN RENTERGHEM Catherine Cyclic adenosine monophosphate, calcium, acetylcholine and the current induced by adenosine in the *Xenopus* oocyte. 551

V. GRAFENSTEIN H.R.K. *see* DOLLERY C.M. & V. GRAFENSTEIN H.R.K. The general anaesthetic urethane inhibits evoked catecholamine secretion and calcium uptake in cultured bovine adrenal medullary cells. (C) 40*P*

WARD K.K. *see* LOW P.A., SCHMELZER J.D. & WARD K.K. The effect of age on energy metabolism and resistance to ischaemic conduction failure in rat peripheral nerve. 263

WATT P.W. *see* BABIJ P., HUNDAL H.S., RENNIE M.J. & WATT P.W. Effects of corticosteroid on glutamine transport in rat skeletal muscle. (C) 35*P*

WELLS Ursula & WIDDICOMBE J.G. Lateral nasal gland secretion in the anaesthetized dog. 359

WERTHEIM D.F.P. *see* BEARD R.W., RANDALL N.J., REGINALD P.W., SUTHERLAND I.A. & WERTHEIM D.F.P. Postural changes in pelvic blood flow in women. (D) 9*P*

WESTON A.H. *see* KREYE V.A.W. & WESTON A.H. BRL 34915-induced stimulation of ^{86}Rb efflux in rabbit aorta and its dependence on calcium. (C) 36*P*

WHITE J.P.N. *see* CANFIELD S.P. & WHITE J.P.N. Duodenal alkalinization in a rat isolated duodenum preparation. (D) 3*P*

WHITTINGSTALL P. *see* RAMPLING M.W. & WHITTINGSTALL P. Rouleaux formation (D) (T) 16*P*

WIDDICOMBE J.G. *see* WELLS Ursula & WIDDICOMBE J.G. Lateral nasal gland secretion in the anaesthetized dog. 359

WOLEDGE R.C. *see* PECKHAM Michelle & WOLEDGE R.C. Labile heat and changes in rate of relaxation of frog muscles. 123

YAMADA Y. *see* NAKAZATO Y., OHGA A. & YAMADA Y. Facilitation of transmitter action on catecholamine output by cardiac glycoside in perfused adrenal gland of guinea-pig. 475